

WHAT IS CLAIMED IS:

1. A method for providing communication between at least two applications, comprising: ²¹⁰
initiating communication from a first application;
5 determining at least a destination address;
establishing a first data channel;
connecting the communication to a second application.
2. The method as claimed in claim 1, wherein:
10 the step of initiating communication including directing the communication from the first application to a second virtual address of the second application.
3. The method as claimed in claim 2, wherein:
the step of initiating the communication including directing the communication from a first virtual address of the first application.
4. The method as claimed in claim 2, wherein: ²¹⁵
the step of determining at least a destination address including determining a (second actual address associated with the second application.)
5. The method as claimed in claim 4, wherein: ²¹⁵
the step of determining at least a destination address including determining a (first actual address associated with the first application.)
6. The method as claimed in claim 4, wherein:
the step of connecting the communication to a second application including directing the communication to the second actual address.
7. The method as claimed in claim 2, wherein: ²¹⁶
the step of establishing the first data channel including
a) communicating between a first computer associated with the first application and a second computer associated with the second application; and
b) coordinating the communication over the first data channel.
8. The method as claimed in claim 7, wherein: ²¹⁶
the step of communicating including communicating over a control channel.

9. The method as claimed in claim 1, further comprising the step of: ²¹²
determining if a first data channel is already established between the first application
and the second application prior to the step of determining at least the destination address.

5 10. The method as claimed in claim 9, wherein: ²¹² *has been*
the step of determining if a first data channel *has* is already established including
verifying a status of the communication channel for the communication between the first
application and the second application.

10 A 11. The method as claimed in claim 1, wherein: ²¹⁵
the step of determining at least the destination address including:
generating a fault notification;
initiating a translation; and
returning the actual address for the destination address.

12. The method as claimed in claim 1, further comprising the step of:
associating the first data channel with at least one socket.

13. The method as claimed in claim 12, wherein:
the step of associating the first data channel with at least one socket including:
associating the first data channel with a first socket associated with the first
application; and ²²²
associating the first data channel with a second socket associated with the
second application.

A 14. The method as claimed in claim 1, further comprising the step of:
updating a first status of the first data channel associated with the first application;
and ²²⁶
updating a second status of the first data channel associated with the second
30 application.

F84 15. The method as claimed in claim 1, further comprising the step of:
destructing the first data channel to halt communication between the first and second
applications. ²⁴⁰

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16. The method as claimed in claim 15, further comprising the step of:
reconstructing a second data channel to allow communication between the first and
second applications.

17. The method as claimed in claim 16, further comprising the step of: ²⁴⁶
the step of destructing the first data channel including receiving an external signal to
close the first data channel.

18. The method as claimed in claim 17, further comprising the step of: ²⁴²
updating a status of the first data channel; and
removing an association between the a socket and the first data channel.

19. The method as claimed in claim 18, wherein:
the step of updating the status including:
updating a first status associated with the first application; and
updating a second status associated with the second application. ^{242 2.5}

20. The method as claimed in claim 18, wherein:
the step of removing an association including:
removing a first association between a first socket associated with the first
application and the first data channel; and
removing a second association between a second socket associated with the ^{242 2.5}
second application and the first data channel.

21. The method as claimed in claim 17, further comprising the step of:
coordinating the destruction of the first data channel over a control channel.

22. The method as claimed in claim 16, further comprising the step of:
determining if an active first data channel is established. ¹¹²

23. The method as claimed in claim 22, further comprising the step of: ²⁴²
coordinating the reconstruction of the second data channel if the first data channel is
not active; and
connecting the second data channel.

24. The method as claimed in claim 23, wherein:
the step of connecting the second data channel wherein the second data channel is
different from the first data channel.

25. The method as claimed in claim 23, wherein:
the step of connecting the second data channel wherein the second data channel is the
first data channel.

26. The method as claimed in claim 23, further comprising the steps of:
updating a status of the second data channel to an active state;
associating the second data channel with a first socket associated with the first
application; and
associating the second data channel with a second socket associated with the second
application.

27. A computer program product for providing access to stored information, the computer
program product including a computer readable storage medium and a computer program
mechanism embedded therein, the computer program mechanism comprising:
a method of providing communication between two applications comprising:
a) initiating communication from a first application;
b) determining at least a destination address;
c) establishing a first data channel; and
d) connecting the communication to a second application.

28. A computer program product as claimed in claim 27, wherein:
the step of initiating communication including directing the communication from the
first application to a second virtual address of the second application;
the step of initiating the communication including directing the communication from
a first virtual address of the first application; and
the step of determining at least a destination address including determining a second
actual address associated with the second application.

29. A computer system providing a method for providing communication between at least
two applications, comprising the steps of:
establishing communication between at least a first application and a second
application over a first data channel;

taking down the first data channel such that the first and second applications are unaware that the data channel has been taken down;
reconstructing a second data channel ^{to} continue to provide communication between at least the first and second application.

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30. The computer system as claimed in claim 29, wherein:
the step of establishing the communication including:

a) utilizing at least a first virtual address for the first application and utilizing at least a second virtual address for the second applications;

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b) directing the communication at least from the first application to the second virtual address associated with the second application;

c) determining at least a second actual address associated with the second application; and

redirecting the communication to the second actual addresses.

31. The computer system as claimed in claim 29, wherein:
the step of taking down the first data channel including:

a) coordinating the bringing down of the first data channel;

b) updating a status of the data channel; and

c) removing an association of at least a first socket associated with the first application and removing an association of at least a second socket associated with the second application.

32. The computer system as claimed in claim 29, wherein:
the step of reconstructing a second data channel including:

a) determining an actual address for at least the second application;

b) coordinating the reconstruction of the second data channel;

c) associating the data channel with at least a third socket which is associated with the first application and associating the data channel with at least a fourth socket which is associated with the second application.

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